# Tampering & Aftermarket Defeat Devices

National Automobile Dealers Association American Truck Dealers June 22, 2017



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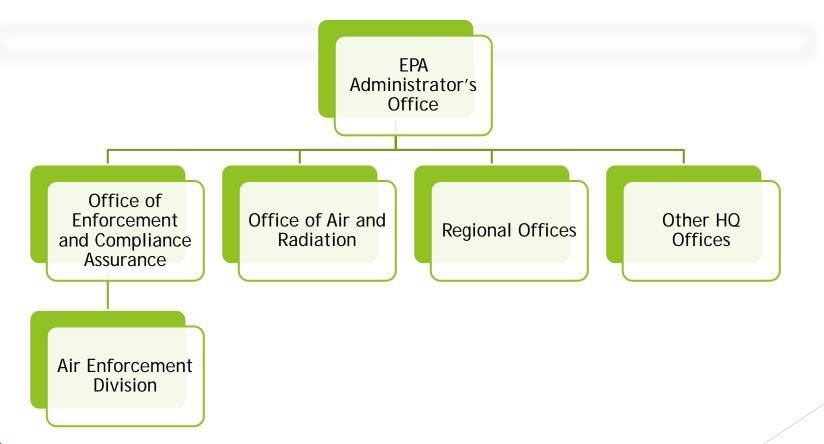
#### Outline

- Overview: EPA, Public Health, and the Clean Air Act
- Defeat Device and Tampering Prohibitions
- Defeat Device and Tampering Examples
- Tampering Enforcement Policy
- Civil and Criminal Penalties
- Warranty Implications





### Vehicle & Engine Enforcement







### Air Quality & Public Health

- ► Heavy-duty highway engine emit large amounts of nitrogen oxides and particulate matter, both of which contribute to serious public health problems in the United States.
- ► These problems include premature mortality, aggravation of respiratory and cardiovascular disease, aggravation of existing asthma, acute respiratory symptoms, chronic bronchitis, and decreased lung function.
- Numerous studies also link diesel exhaust to increased incidence of lung cancer.



### The Clean Air Act

- ► The Clean Air Act (CAA) was enacted by Congress in 1970, and amended in 1977 and 1990.
- ▶ Title II of the CAA Mobile Source Provisions
  - On-highway (motor vehicles and motor vehicle engines) and nonroad (nonroad vehicles and nonroad engines) are regulated.
  - "Motor Vehicle" includes all cars, trucks, motorcycles
  - "Nonroad" includes construction equipment, lawn and garden, generators, marine, locomotive, recreational vehicles
- ► Today's discussion is focused on aftermarket parts and service.



## CAA Title II Prohibitions: Defeat Devices

#### The following acts and the causing thereof are prohibited –

- For any person to manufacture or sell, or offer to sell, or install, a part or component for a motor vehicle, where
  - A principle effect of the part or component is to bypass, defeat, or render inoperative any emission control device, and
  - The person knows or should know that such part or component is being offered for sale or installed for such use or put to such use.

CAA § 203(a)(3)(B), 42 U.S.C. § 7522(a)(3)(B).



# CAA Title II Prohibitions: Tampering

#### The following acts and the causing thereof are prohibited –

- For anyone to remove or render inoperative an emission control component on a certified motor vehicle or engine prior to sale or delivery to ultimate purchaser, or
- For anyone to knowingly remove or render inoperative any emission control component on a certified motor vehicle or engine after sale and delivery to the ultimate purchaser.

CAA § 203(a)(3)(A), 42 U.S.C. § 7522(a)(3)(A).



# Defeat Device and Tampering Examples

- Alterations to Fueling, Timing Strategy
- DPF Delete
- EGR Delete
- ❖ SCR Delete
- Alterations to OBD
- Software and Hardware



# Defeat Device and Tampering Examples

- Service adjustments to engines that do not conform to the original equipment manufacturer's specifications;
- Installation of parts not built to OEM specifications;
- ❖ If a service provider discovers tampering while performing work on an emission system, the service provider must return that system to OEM specifications.



# Memo 1A - Tampering Enforcement Policy

- Interim Tampering Enforcement Policy Memorandum 1A- (6/25/74)
- ► Memo 1A allows the sale and use of aftermarket parts when an individual or company has a "reasonable basis" to believe their actions do not increase emissions
- ► EPA issues no approvals under Memo 1A



### Memo 1A Requirements

In order to prevent and protect yourself from violations of the prohibitions on tampering and defeat devices, you should have in your records:

- ► Emission test results from tests conducted in accordance with EPA's federal test procedure (FTP) showing that similar vehicles meet the standards for the vehicles' useful lives *or*
- ► An EPA Aftermarket Parts Certificate
- ► Generally, the testing required for a CARB EO is the same as the testing required under Memo 1A because the test procedures are usually the same

Vehicle must perform the same on- and off-cycle



### **Civil Penalties**

- Max penalty for manufacturers or dealers is \$45,268 per violative vehicle or engine.
- Max penalty for individuals is \$4,527 per violative vehicle or engine.
- Max penalty per defeat device is \$4,527.
- Penalties are in addition to the cost of bringing the violative vehicle or engine back into compliance.
- Individuals, dealers, and manufacturers are also liable if they cause tampering or defeat device violations.



### **Criminal Prohibitions**

- ► It is a crime to knowingly falsify, tamper with, render inaccurate, or fail to install any "monitoring device or method" required under the CAA.
  - ► CAA § 113(c)(2)(C), 42 U.S.C. § 7413(c)(2)(C).
- ► Vehicle Onboard Diagnostics (OBD) are a "monitoring device or method" required by the CAA.



### Warranty Implications

- Consumers and service technicians should investigate warranty implications in advance.
- Tampering can void manufacturer warranties and insurance agreements if the tampering can be shown to have caused the failure.

### Other Issues

- ► In-Use GHG Compliance
- ► Heavy-Duty "Glider Vehicles" and "Glider Kits"

### Report Violations

Report violations online:

https://www.epa.gov/enforcement/report-environmental-violations